

### NEW JERSEY DIVISION OF FISH AND WILDLIFE

Bureau of Freshwater Fisheries P.O. Box 394 Lebanon, NJ 08833 Phone: (908) 236-2118 Fax: (908) 236-7280



### FISH STOCKING RECOMMENDATIONS FOR NEW JERSEY PONDS AND LAKES

All water bodies should contain fish life if for no other reason than to minimize mosquito production. However, a pond or lake can provide untold hours of angling recreation and a source of food if properly stocked and managed.

The largemouth bass is the most common warmwater predator fish in all the lakes and ponds in New Jersey. They can live and reproduce in just about any size pond down to about one-quarter acre. They can tolerate a wide range of water chemistry; however, they are generally not very successful in acid water ponds where the pH drops to less than 5.5. The pH factor can be readily measured by any local water testing company; or else you can do it yourself with a good quality swimming pool pH kit. If the pond water chemistry is of borderline pH, it is best to measure it in late winter to obtain a reading at the most critical time of year.

Before you stock largemouth bass in any previously established pond it is wise to determine if you actually need bass. Of course you can walk around the perimeter on a bright day and see if you can spot the juveniles and adults, however, the best way to tell if you have an already established bass population is to check for bass reproduction. This is best accomplished in July or August by netting the shallows with a small (approximately six to ten foot) minnow seine. The presence of natural reproduction negates the need for any stocking on your part.

If the water quality is acceptable for largemouth bass then it is acceptable for bluegill sunfish, which should be stocked along with the bass. Bluegill sunfish rather than pumpkinseed sunfish are recommended because of the latter's tendency to stunt. Sunfish are the prime long run food item for largemouth bass and because of their abundance and their willingness to take a variety of small baits and lures, they are our most popular panfish. Fishing for sunfish is a sport that is enjoyed by old and young alike.

The stocking of fathead minnows in a new pond before the introduction of largemouth bass is an ideal way to get the pond off to a good start. These little minnows make ideal forage for the bass especially when the bass are very young and are not quite ready to start feeding on the wide-bodied young sunfish. The fathead population will eventually disappear because of predation, however, they will have served their prime function of putting good early growth on the bass who then should be large enough to keep the sunfish population from becoming too large and consequently from becoming stunted.

Many people enjoy catching catfish or bullheads. These species can live in small ponds having a pH greater than 6.0, however, there is no ecological reason why they must be stocked in every water. Channel catfish fingerlings are becoming more readily available from private hatcheries and they are certainly a high quality eating fish. Their sporting qualities are quite high and their potential large size (up to 14 pounds even in small ponds) makes them a favorite of the anglers. The brown bullhead, a native catfish, does well in small ponds, however, they are not readily available from commercial hatcheries.

In the more western and northern sections of the state certain spring fed pond are capable of holding trout year-round. Ideally these ponds would be free of all other species including any forage minnows and they should have subsurface (two or three feet down) water temperatures that do not exceed  $70^{\circ}$  F in mid-summer. If you are so inclined, you may wish to try stocking trout in a pond of this sort and if you're not satisfied with the results, you can always stock warmwater species (bass and bluegills) at a later date. Do not expect trout to spawn under pond conditions.

## **Stocking Recommendations**

Fathead minnows should be stocked as early in the summer as possible. A rate of 1,000 fish per acre is not too many and if there is no cover in the pond, the spawning capabilities of the population can be greatly enhanced by providing spawning structures, to the underside of which they attach their eggs. These devices can be floating boards staked in the shallows or pieces of masonry tiles or pipes, etc., placed around the edge of the pond.

If no fathead minnows are to be stocked, it is recommended that a maximum of 100 adult sunfish (preferably bluegill sunfish) per acre be stocked around the beginning of August. This will allow these fish to spawn at around the approximate time that the young bass are introduced into the pond. If fathead minnows are stocked then young-of-the-year sunfish can be introduced in place of adults (500 per acre) into the pond at the same time as the bass.

Young-of-the-year largemouth bass are available from many commercial hatcheries in late summer, however, in order not to be disappointed, it is recommended that you place your order early in the summer as like any other natural crop, their period of availability is often quite short. Stocking at a maximum rate of 100 young per acre is not excessive, however, you may wish to downgrade this number based on the productivity of the water and the amount of fishing pressure that you intend to apply. If you do reduce this number, you should also proportionately reduce the numbers of sunfish that you stock.

As mentioned earlier you can add young channel catfish to the pond if you would like an additional sportfish and a source of delicious tasting food. They can be stocked up to 100 fingerlings per acre at the same time as the bass in repoductive ponds. Keep in mind that channel catfish do not spawn naturally in ponds so in order to keep harvesting this specie, you will have to plan on restocking at least every three to four years.

If you elect to try trout in your pond, you can stock rainbow trout if you have no other species present or you can stock brown trout if you have other species in the pond. Start out by stocking catchable size trout in the spring and see if you can catch them on a year-round basis. You should try to harvest at least one-half of the stocked trout before the on-set of the cooler months. The number you stock depends a lot on your finances and the amount of trout you expect to fish out, however, 100 catchables per acre would be a good starting point.

### **General Recommendations**

The New Jersey Fish and Game Code requires that a stocking permit from the Division of Fish and Wildlife is required for the stocking of any fish or fish eggs in all waters of the State, both public and private, which are contiguous with the ocean.

Also, Title 23:5-30 of the revised Statutes prohibits the stocking of "any kind of carp, or the seed thereof, in any of the public or private waters of the State".

For further information on fish stocking or lake management, please contact us at the above address or phone and we will be glad to help.



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# APPLICATION FOR A FISH STOCKING PERMIT (\$2.00 FEE)

(Make Check Payable To: NJDFW)

ALL ITEMS MUST BE COMPLETED – REFER TO INFORMATION SHEET. (PLEASE PRINT OR TYPE) OFFICIAL USE ONLY 1. APPLICANT INFORMATION DATE RECEIVED PERMIT #  $LAST\ NAME\ ({\rm If\ organization,\ also\ indexate\ contact\ person})FIRST\ \overline{NAME}$ M.I. DRAINAGE STREET ADDRESS CITY/TOWN STATE ZIP CODE EFFECTIVE DATE TELEPHONE (EVENING) **EXPIRATION DATE** TELEPHONE (DAYTIME) ) ) **REMARKS:** 2. WATERBODY INFORMATION NAME OF WATERBODY (ONE ONLY) WATERBODY SIZE (ACREAGE OF LAKE) FISH SPECIES PRESENT IS THE WATER TO BE STOCKED OPEN TO THE YES  $\square$ NO 🗌 GENERAL PUBLIC? COUNTY MUNICIPALITY NEAREST ROAD (IF STREAM, GIVE APPROX. LOCATION OF UPSTREAM & DOWNSTREAM BOUNDARIES) 3. FISH STOCKING INFORMATION FISH SPECIES (ONE PER ROW) NUMBER SOURCE OF FISH (NAME & SIZE RANGE OF FISH (IN INCHES) LOCATION OF HATCHERY OR DECISION BODY OF WATER FROM WHICH APPROVED DENIED FISH ARE TO BE OBTAINED) ARE FISH BEING STOCKED FOR A CONTEST, TOURNAMENT OR EVENT? ARE FISH GOING TO BE MARKED OR TAGGED? YES NO YES  $\square$ NO  $\square$ IF YES GIVE DATE(S) ANTICIPATED STOCKING DATES IF YES, INDICATE MARK OR TAG TYPE AND ANY LETTERING THAT WILL APPEAR ON TAG. 4. APPLICANT'S SIGNATURE I CERTIFY UNDER PENALTY OF LAW THAT THE INFORMATION PROVIDED IN THIS DOCUMENT IS TRUE. ACCURATE AND COMPLETE. DATE SIGNATURE OF APPLICANT